



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

readily apply to the gigantic forms since they could easily have waded out of the flooding waters, but they may have lost their sense of shore direction and, becoming confused, gone into deeper waters and drowned. We may also assume, since the strand line repeatedly rose and fell, as is indicated by the changing characters of the strata, that large land masses were separated into islands and that these were finally submerged beneath the sea with all the life upon them."

Dr. Hennig says in conclusion:

"We may picture to ourselves as follows the wonderfully varied life that dwelt along the strand of this Cretaceous sea. Here trod those dull-witted giants whose necks were more than twelve meters long and up to two meters thick, with length of legs exceeding any known size; here hurried about the dragon-tribe, large and small, down to the tiniest lizard; here appeared herds of armored dinosaurs, terrible in shape, with mighty spines along the back and tail; here hastened past small swift saurians erect upon their hind legs, while others flew through the air; here were the fearsome flesh-feeding robbers and the Gigantosaurians who alone because of their size could escape from them alive and who fed their huge bodies upon plants and smaller sea animals. Scarcely can the noble and prolific animal life of Africa to-day compare in diversity with the assemblage which here lies before us."

GEOGRAPHICAL RECORD

THE AMERICAN GEOGRAPHICAL SOCIETY

MR. ROBBINS RETIRES FROM THE CHAIRMANSHIP OF THE COUNCIL. Mr. Chandler Robbins, Chairman of the Council since early in 1907, declined reelection at the meeting of the Council on Feb. 20 and Mr. John Greenough was unanimously elected to the position. On taking the Chair, Mr. Greenough expressed his appreciation of the honor conferred upon him, adding that he wished to record the obligation of the Society to his predecessor Mr. Robbins for his unequalled services covering a period of forty-one years. Mr. Robbins was elected a Fellow in 1872. In 1886 he was appointed a member of the Executive Committee which then had charge of the affairs of the Society. In 1887 he was appointed a member of both House and Finance Committees, served as Domestic Corresponding Secretary from March, 1897, to November, 1906, and was elected Chairman of the Council on Feb. 21, 1907. Mr. Greenough expressed the feeling of his colleagues in hoping that the Society would long continue to enjoy the assistance of Mr. Robbins as a member of the Council and of its Committees.

MR. MADISON GRANT ELECTED TO THE COUNCIL. The Council on Feb. 20 elected Mr. Madison Grant a Councillor of the Society for the term expiring in 1914.

THE SOCIETY'S DELEGATE TO THE TENTH INTERNATIONAL GEOGRAPHICAL CONGRESS. The Council, at its February meeting, appointed Herbert L. Bridgman,

M.A., President of the Department of Geography of the Brooklyn Institute of Arts and Sciences, its delegate to the Tenth International Geographical Congress, which will meet in Rome, March 27-April 3, 1913.

GROWTH OF THE LIBRARY AND MAP COLLECTIONS. Dr. Randall-MacIver, the Librarian, in his report to the Council on the progress made during 1912, says that the accessions of books, periodicals and pamphlets amounted to 5,570 and of maps and atlases to 1,210. Nearly all the maps and 460 volumes were sent gratuitously by the publishers. In the past year notable gaps in the literature of certain subjects were filled. The policy in the future should be to make our collections exhaustive in one subject after another. Within the next few months the sections on North and West Africa will be practically complete from the year 1800. Lists for South, Central and East Africa have been prepared and those for Indo-China and China are now in course of preparation.

The arrangement of the stack floors has been reorganized. Every volume and pamphlet now has its exact place assigned. The ground floor and first mezzanine are occupied by the *Regional Geography of the Old and New World* respectively. The next floor is occupied by general works of travel in which the library is very rich; by books on the scientific divisions of geography and by the proceedings and transactions of geographical societies. The second mezzanine contains mainly publications of learned societies, the third floor is assigned to official geographical and statistical reports of various governments throughout the world, and the third mezzanine will soon be required for the increasing number of these government papers. It is expected this year to bind several thousands of volumes that are still in paper covers. The library staff has been increased to cope with the growth of the work. The accessions of maps have quadrupled within the past year.

THE CHARLES P. DALY MEDAL AWARDED TO MR. ALFRED H. BROOKS. At the meeting of the Council on Feb. 20 the Charles P. Daly Medal for Geographical Research was unanimously awarded to Alfred Hulse Brooks, the geologist of the U. S. Geological Survey in charge of the Division of Alaskan Mineral Resources, in recognition of the excellence and the importance of his work in the exploration and mapping of Alaska.

MEETINGS OF THE SOCIETY. The Society had a special inter-monthly meeting on Feb. 11, 1913, at the Engineering Societies' Building. Vice-President Greenough in the chair. Mr. Albert B. Osborne delivered a lecture entitled "Across the Adriatic," which was illustrated by lantern views.

A regular meeting of the Society was held in the Engineering Societies' Building, No. 29 West 39th Street, on Tuesday, Feb. 25, 1913, at 8.30 o'clock. Vice-President Greenough in the chair. The following persons recommended by the Council were elected Fellows:

Charles A. Elsberg, M.D.,
Edward Everett,
William B. Osgood Field,
Lewis B. Gawtry,
H. L. Higginson,
Mrs. R. Hoe,
DeRuyter M. Hollins,
Mrs. Edwin O. Holter,
William Hood,
H. William Hyatt, M.D.,
Samuel K. Jacobs,
John Percival Jefferson,
David Starr Jordan,

Harris Kennedy, M.D.,
Harry K. Knapp,
Augustus S. Knight,
Arnold Kruckman,
Walter G. Ladd,
Adrian V. S. Lambert,
Mrs. James T. Leavitt,
Meyer H. Lehman,
John W. Leonard,
Miss Agnes Vinton Luther,
Robert Grier Monroe,
William R. Northrup,
Charles S. Untermeyer.

Professor Ellsworth Huntington then addressed the Society on "Rambles in Asiatic Turkey," with lantern illustrations.

NORTH AMERICA

THE NATIONAL WATERWAYS COMMISSION. This Commission composed of twelve members of the Senate and House, was created by Act of Congress of

March 3, 1909. The duty imposed upon it by statute was to investigate questions pertaining to water transportation and the improvement of waterways and to make recommendations to Congress. The Final Report* discusses a number of topics listed below and offers a number of recommendations.

1. *Canals.* The Commission recommends as advisable the proposed canal connecting Lake Erie with the Ohio river near Pittsburgh and considers feasible the Lake Erie to Lake Michigan canal by the Maumee river and the Anacostia canal to Chesapeake Bay.

2. *Railway Interference.* A careful statement of the situation accompanies this discussion. The cooperation between railroads and waterways is a vital point in the success of the waterways policy, but the cooperation should stop short of the elimination of water competition by ownership which will allow discriminating practices while it should not prohibit or discourage legitimate investments by railroad companies in waterway lines. The control of waterways by the Interstate Commerce Commission is recommended as a step towards a remedy.

3. *Water Terminals.* The Commission advocates a public control of terminals and the condemning for public use of water frontage held undeveloped by railroads or other private interests.

4. *Storage Reservoirs.* This has been a mooted point in the waterways discussion. The Commission does not advise reservoirs without reserve, nor do they overlook their value. A safe basis for the consideration of this type of control is given in the report.

5. *The Influence of Forestation.* From the somewhat heated arguments by the advocates for and against forestation as a means of river control the Commission has gleaned valuable truths. It has been able to view both sides of the question with equanimity and consequently its conclusions and recommendations, although moderate, represent the extent of safe procedure to-day. Here again the novice who desires to begin his studies of the waterways problem may find a safe, concise and clear view of the field. In the appendix, Zon has presented his views of the problem and has added an extensive and valuable bibliography.

6. *Desirable Legislation.* A discussion of the legal aspects of the question. The Report is to be highly recommended.

ROBERT M. BROWN.

ANNUAL RAINFALL AND TEMPERATURE OF THE UNITED STATES. A study of the annual rainfall and temperature of the United States, begun by Professor Nipher and completed by Mr. George A. Lindsay, has been published in the *Transactions of the Acad. of Sci. of St. Louis*, Vol. XXI, 1912, No. 2, pp. 71-78. (Reprinted in *Mo. Wea. Rev.*, 1912, pp. 720-721.) By a process of interpolation of rainfall amounts and of temperatures it has been determined what was the total depth of rainfall over the United States in each of the fourteen years considered (1891-1904). The mean annual precipitation over the United States ("excluding the outer parts") is 1,308 cubic miles, and the mean annual temperature is 52.9° F. The total rainfall in cubic miles falling upon the State of Missouri during 10 years was within 2 per cent. equal to the discharge of the Mississippi River at St. Louis during that interval. It is easy to see how small is the amount of water which reaches the sea through the medium of ordinary river drainage as compared with the amount which actually falls as rain or snow.

R. DEC. WARD.

THE LOWERY COMPILATION OF EARLY AMERICAN MAPS. A valuable addition to the history of American cartography came from the press of the government printing office last year under the title: "A descriptive list of maps of the Spanish possessions within the present limits of the United States, 1502-1820." Seven hundred and fifty maps belonging to this period are described. In many instances the descriptions are accompanied by long commentaries referring not only to early American cartography but also to the history of exploration on the American continent. The manuscript was compiled by Woodbury Lowery, a scholarly investigator and historian of the early Spanish settlements on this hemisphere. The notes and editing are due to Philip Lee Phillips, chief of the Division of Maps and Charts at the Library of Congress.

* Final Report of the National Waterways Commission. Senate Document, No. 469. 62d Congress. 2d session. 579 pp. Government Printing Office, Washington, 1912.

CANADA'S NEXT TRANSCONTINENTAL RAILROAD. The Grand Trunk Pacific R.R. announces that the gap between the eastern and western heads of the track in British Columbia is now only 426 miles long and work on this part of the line is under way in sections throughout its entire length. East of Prince Rupert, the Pacific port of the road, the completed track is now 195 miles from the Pacific coast.

CENTRAL AMERICA

ELLSWORTH HUNTINGTON'S VISIT TO GUATEMALA. Professor Ellsworth Huntington left New Haven on March 4 for a short-visit to Guatemala chiefly to see the remarkable ruins there and study the various types of forest, jungle and savanna or other vegetal growths in which they are located. Some are described as in the densest, most vigorous tropical forest and some in comparatively dry and open situations. He also desires to see whether the abundant terraces which he believes are of climatic origin and which are found in Mexico as far south as Oaxaca, continue into Central America. The work is a continuation and testing of some of the results which he obtained last year in Yucatan and Mexico. He expects to return home not later than April 9.

SOUTH AMERICA

ANNIVERSARY OF THE LIMA GEOGRAPHICAL SOCIETY. The Sociedad Geografica de Lima, one of the most notable of the geographical societies of South America, whose work and publications have made many additions to our knowledge of Peru and contiguous regions, will celebrate the twenty-fifth anniversary of its founding on February 22, 1914.

THE ARGENTINE MILITARY GEOGRAPHICAL INSTITUTE. The first annual report of this institution has been issued for the year 1912. It was founded in 1884 after the Andean campaign. It now forms the third division of the General Staff. Its chief work consists in mapping. The staff has been particularly active in the province of Buenos Aires where surveying has been carried forward to a very advanced stage.

The field work undertaken by the Institute provides the required data for the compilation of four important sets of Argentine maps: (1) Educational wall-maps on a scale of 1:2,000,000 showing the general configuration and the principal features of the country. Flamsteed's modified projection or Bonne's will be used for this map. (2) 21 sheets of the International Map of the World. (3) A general atlas of the Republic on a scale of 1:100,000 which will consist of 1,237 sheets. (4) Detail maps on a scale of 1:25,000. In addition special maps of general or particular interest are compiled as occasion arises. The Greenwich meridian is adopted.

At present the work of compiling the Argentine sheets of the International 1:1,000,000 Map of the World is being prosecuted. Work on this map was begun in February, 1911. This month was devoted to the calculation of the projection and the construction of the required system of coordinates. Then the geographical determination of points shown on the sheets was begun along with actual drafting. The end of August, 1911, witnessed the publication in provisional form of sheets I 21 Buenos Aires, H 21 Concordia and G 21 Corrientes. Final corrections are now being made and these maps are soon to be available in permanent editions. The hydrographic plate of every sheet had been prepared by the end of 1912 while the topographic detail of sheets I 20, J 20, K 20, J 21, and N 19 was being drafted.

AFRICA

MAGNETIC SURVEYS IN THE SAHARA. In the course of the great work which the Carnegie Institution of Washington is prosecuting of making a magnetic survey of all parts of the world, it has now directed its attention to the Sahara. On October 15, a party under the leadership of M. W. Sligh left Algiers to establish the magnetic elements in the Western Sahara.

STUDYING TRANS-SAHARAN RAILROAD ROUTES. According to Paris correspondents in British newspapers the French sent out parties last winter, to

study various suggested routes for railroads across the Sahara to connect Algeria with Central Africa. Several members of these parties have returned to France and the information they bring seems to show that the scheme is practicable and does not involve serious engineering difficulties. One party traveled southeast from Colomb-Bechar, the southwestern terminus of the Algerian R. R. system to Insala, Agades and Lake Chad. Another party, branching off at Insala, went due south to about the latitude of Timbuktu then turned east and rejoined the first route at Agades. A third starting from Gao on the Niger traveled northward to Silet. All the information brought by the surveying parties will be carefully studied with a view to evolving if possible a definite plan for a railroad across the desert.

CARTOGRAPHY OF THE BELGIAN CONGO. The progress of cartography in the Belgian Congo is best revealed by a comparison of the 12-sheet map prepared by Wauters between the years 1896 and 1899 and the 1:1,000,000 map recently issued by the Ministère des Colonies. As a rule the most informative maps have been the ones published in official bureaus either by the former "Service Cartographique de l'État Indépendant du Congo," or by the Belgian Colonial office. A number of general political maps on a scale of 1:1,000,000 were published between 1895 and 1910. The government also published physical and economic maps of the region. Practically all of the cartographic output of various publishers has been based on official documents.

The *Revue Congolaise* (Vol. 2, No. 4, April 1912, pp. 378-379) gives a list of the more important regional maps of the Belgian Congo, among which the following are best known:

(1) Carte du Bas-Congo, by Hubert Droogmans, on a scale of 1:100,000, in 15 sheets; (2) Carte du Katanga (territoires gérés par le Comité Spécial du Katanga), published in Brussels in 1903 and 1910 by the same author; (3) Map of the environs of Lake Albert and Albert Edward, by Moisel based on Stuhlmann's data, 1901; (4) Carte de la région du Mayombe au 125,000e, by M. Diderrich, Brussels, 1899; (5) Carte Scientifique du Katanga au 50,000e, by Ch. Lemaire, published in "Atlas accompagnant les mémoires scientifiques de l'expédition du Katanga," Brussels, 1901; (6) Carte fluviale du Congo de Brazzaville à Liranga, (26 sheets on a scale of 1:50,000), Paris, 1908; (7) Carte fluviale d'Oubangi, 40 sheets on a scale of 1:50,000, Paris, 1906; (8) British Admiralty charts: No. 638m Africa, West Coast, River Congo and adjacent creeks. Banana creek. No. 1991m. River Congo, Camoens Point to Princes Island; (9) Carte des réserves minières existant au 15 janvier 1911. Published by the Comité Spécial du Katanga.

PROGRESS IN RHODESIA. The Report of the British South Africa Company for the year ending March 31, 1912, shows important progress in the development of both Southern and Northern Rhodesia. In Southern Rhodesia there are now 463,923 cattle, more than two and a half times the number owned there at the time of the last census, seven years ago. The production of tobacco has increased in three years from 132,310 pounds to 1,397,000 pounds and the crop for the coming season is estimated at over 2,500,000 pounds. The citrus fruit industry is growing and the quality of the product is excellent. Land values are rising owing to the gradual establishment of immigrant farmers of good type with considerable capital. The outputs of gold, coal and chrome iron have exceeded all previous records. In Northern Rhodesia the suitability of much of the country for cattle raising is becoming more and more evident and the introduction of the best breeding animals from England is having a good effect. The cotton industry is growing and nearly 5,000 acres are now in that crop.

NEW ITALIAN COLONIES IN AFRICA. The text of the royal decree relating to the administrative subdivision of the North African territory lately conquered by Italian troops is given in the first 1913 number of *l'Esplorazione Commerciale* (Vol. 28, No. 1, Jan. 1913). According to this document the new Italian possession is divided into the two distinct colonies of Tripolitania and Cirenaica with capitals at Tripoli and Bengasi respectively. A governor is appointed for each colony by the King upon the joint recommendation of the Ministers of Colonies

and of War. He is directly responsible to the Minister of Colonies for all acts committed in his executive capacity.

ASIA

SHORT CUT FROM SHANGHAI TO PEKING. China has opened her shortest cut from Shanghai to Peking. Early in December through R.R. traffic was opened from Pukow, on the Yangtze River to Tientsin, and a journey is now possible from Shanghai to Peking in 40 hours as against 5 days by the previous shortest route. The only other line from the Yangtze to Peking is that from Hankow, a length of some 755 miles. The newly opened line from Pukow to Tientsin is 626 miles, and to that has to be added the 73 miles from Tientsin to Peking and the 193 miles from Shanghai to Nanking, making the total rail distance from Shanghai to Peking some 892 miles, which is broken only by the Yangtze River at Nanking. (Condensed from *Daily Cons. and Trade Repts.*, No. 41, Feb. 18, 1913).

AUSTRALASIA AND OCEANIA

CARL LUMHOLTZ'S NEXT EXPEDITION. *Petermanns Mitteilungen* (December, 1912, p. 347) says that Carl Lumholtz expects soon to go to Borneo and secure on the lower Boeloengan River the service of 60 or 70 natives to go with him to Diguel R., New Guinea, which he hopes to explore at least as far as the limit of navigation. From this point it is his plan to penetrate into the unknown region and establish the eastern extension of the Great Snow Range. A European topographer will assist him in his route surveys. He is said to have the financial support of the Royal and the Netherlands Geographical Societies, but if his funds do not permit the carrying out of his entire programme of work in New Guinea, he will remain longer in Borneo. In this case he will very likely extend the exploration of the Boeloengan River, which is now known only in its lower part.

RAINFALL OF AUSTRALIA. The Central Weather Bureau of the Australian Commonwealth has issued an "Average Rainfall Map of Western Australia," which is the fourth of a series now being prepared by the Bureau to show the annual rainfall distribution throughout the Commonwealth. The heaviest rainfall is, of course, over the southwestern part of the state, which has a long coastline exposed to the Indian Ocean and to the full force of the westerlies. The rainfall there, and over the southwestern half of the state, except in the eastern gold fields, is a winter one, 80 to 90 per cent. of the annual totals in the southwestern agricultural areas falling during the growing period, April to October. From the coast inland, for about eighty to one hundred miles, the rainfall decreases rapidly, but the southwestern area of fifteen or more inches of fall covers about 75,000 sq. miles. The full effects of the westerly winds are apparently not felt beyond Lat. 27° S, the fifteen-inch isohyet, and from there to the tropic the rainfall is scanty, and occasionally amounts to only three or four inches a year. North of the tropic the Kimberly district receives good tropical rains during the summer, from November to March or April. It is interesting to observe that the De Gray and Fortescue districts are dependent for their rainfall partly on tropical storms, commencing about December, and partly on winter rains from the Indian Ocean.

Australia's eastern highlands have heavy rainfall, while the plains to the west, in the rain-shadow, are arid. The problem is very similar to that in several parts of our own country, for example in the Yakima Valley, in Washington, or in the Nevada desert, east of the Rocky Mountains. Water for local irrigation may be found in rivers which descend from the well-watered mountain summits and upper slopes, but reservoirs must be built, and irrigating canals. In New South Wales there is an important project in hand for collecting the winter floods of the Murrumbidgee River for summer use. A reservoir with a dam 240 feet high is to be built, holding 33,000,000,000 cubic feet of water. Channels amounting to 1,000 miles in length are to be built to conduct the water to a large area more than one hundred miles to the west. Thus is man expressing his dissatisfaction with the provision which nature has made, and taking the water from the place where it falls as rain to the place where he needs it

most. Furthermore, he is changing the season at which the water is supplied, from the winter, when the floods naturally come, to the summer when his need is the greatest.

R. DEC. WARD.

EUROPE

SEMI-CENTENNIAL OF THE DRESDEN GEOGRAPHICAL SOCIETY. This Society celebrated the completion of the first fifty years of its existence on March 14. Among the exercises was an address by Prof. Dr. Partsch of Leipzig entitled "In Arizona, dem Lande des Sonnenscheins und des Silbers," with lantern illustrations. A banquet completed the day.

PUBLICATIONS OF THE ITALIAN MINISTRY OF COLONIES. This new department is continuing the publication of the series of colonial reports and monographs of high scientific value which had been undertaken by the former central bureau of colonies at the Ministry of Foreign Affairs. Most of these volumes contain data on economic geography, the result of direct observation in the course of explorations undertaken for the account of the Italian government. As such the set constitutes a valuable work of reference on oversea Italian territory.

POLAR

THE BRITISH ANTARCTIC EXPEDITION. The news came on Monday, Feb. 10, that the *Terra Nova* had returned to New Zealand bringing the sad tidings that Captain R. F. Scott commander of the British Antarctic Expedition, and four of his men had perished after reaching the South Pole. The bodies of Captain Scott, Dr. E. A. Wilson and Lieut. H. R. Bowers were found only 155 miles from the winter camp on McMurdo Sound. Captain L. E. G. Oates met a similar fate on March 17, 1912, some twelve days, it is believed, before Scott, Wilson and Bowers perished. Petty Officer Evans had died a month earlier. All the other members of the party have returned on the *Terra Nova*. An account of the expedition will be printed in the *Bulletin* later. Meanwhile a summary of the terrible disaster which all the world deploras and of some results of the expedition will be given here.

As the *Bulletin* reported (Vol. 44, 1912, pp. 270-277) the party under Captain Scott bound for the Pole left Hut Point, McMurdo Sound, on Nov. 2, 1911, and on Dec. 10, reached the Beardmore Glacier, which was ascended. On Dec. 21 they stood on the high plateau of the Antarctic Continent, 8,600 feet above sea level. From this point Captain Scott and his companions dragged their sledges all the way to the Pole. The last supporting party left Captain Scott and his four comrades in excellent health and spirits on Jan. 4, 1912, in 87°35' S. about 153 statute miles from the Pole. The party travelled an average of twelve miles a day to the Pole, which they reached on Jan. 17. They found the record and tent which Amundsen had left there. Captain Scott used his four-inch theodolite in taking sights, while Amundsen had depended on his sextant with an artificial horizon. The determination of the position of the Pole by the two explorers differed by only a half mile.

On the return journey the party sledged about eighteen miles a day to the summit of the Beardmore Glacier. Nearby was Buckley Island, a large nunatak where coal was found and fossil bearing sand-stones. These fossils will probably settle the age of the latest sedimentary deposits yet found in Victoria Land. While descending the glacier, fossils of much greater age, found in limestone were obtained from the side of Cloudmaker Mountain. In all thirty-five pounds of geological specimens were carefully packed, taken by Scott, to his last camp, and have been brought home by the *Terra Nova*.

Petty Officer Edgar Evans had been failing in strength from the time of reaching the Pole. He fell, during the descent of the glacier, injuring his head. The progress of the party was delayed by his condition and on Feb. 17 he died. This delay made serious inroads upon the surplus provisions and unduly advanced the time of return. The average distance between two main depôts was sixty-five miles, which meant that the party must average over nine miles per day in order to obtain full supplies. But the best march on the return was only nine miles in a day and in the later stages of the journey it fell as low as three

miles. Captain Oates became almost helpless and, to crown their difficulties, a terrible blizzard overwhelmed them and they were compelled to pitch their tent only eleven miles from One Ton Camp, where abundant resources awaited them. They were too weak to travel further. Captain Oates left the tent in the blinding storm and probably died not far away, though the search party failed to find his body. The bodies of the other three men were found in the tent. All of the records were recovered, including Captain Scott's diary, which contained a "Message to the Public," one of the bravest and most pathetic records of hardihood, endurance and courage that was ever penned.

The three men were buried in the tent where they had died and a cairn and cross were erected over their grave.

While Scott was on his way south the northern party, consisting of Lieut. Campbell, Surgeon Levick, geologist Priestly, two petty officers and a sailor, landed on the mainland of South Victoria Land at Terra Nova Bay on Jan. 8, 1912, and set out with the intention of proceeding to the northern extremity of the plateau, between Mt. Melbourne and the Nansen range. The party returned to Terra Nova Bay on Feb. 17, having accomplished its work. It expected to be picked up by the *Terra Nova*, but, as the *Bulletin* reported last year (p. 272), the ice conditions prevented the vessel from approaching the bay. The Campbell party, 200 miles north of the headquarters of the expedition, was thus compelled to spend the winter on the mainland in a snow igloo, living chiefly on seal meat, eked out by the insufficient supplies they had brought with them. They were able to return to the base station in November last.

The scientific work of the expedition, for which it was admirably equipped, was carried on assiduously and is expected to yield results of great value. The irreparable calamity that befell the expedition has in no way interfered with its scientific success. The American Geographical Society, as well as many similar organizations, cabled an expression of its deep sympathy to the Royal Geographical Society. The despatch sent by President Huntington was as follows:

"On behalf of the Council and members of the American Geographical Society I am requested to send to you the expression of our profound sympathy for the loss of Captain Robert F. Scott, to whose courageous achievement and devotion to the cause of science this Society desires to bear earnest tribute, together with profound sympathy for those to whom his untimely death has brought such great sorrow."

In opening the meeting of the Society on Tuesday Evening, Feb. 11, Vice-President Greenough made these remarks:

"I cannot omit some few words with reference to the tragedy in the Antarctic announced to-day in the papers. We have all read the account and it seems clear that a disaster has overtaken Captain Scott and his party, to parallel which we have to go back to the fate of Captain DeLong and his companions in the Jeannette Expedition. The diary of the latter with its daily record of famine until the end is the saddest story of travel; and the pathos and heroism of it appear to have been repeated in the present instance. That Captain Scott should have been taken away just at the brilliant conclusion of his many years of toil in the cause of science makes his end doubly tragic in the loss to the field of knowledge as well as to his friends. I know that I express the feeling of every member of the Society in saying that we are filled with sorrow for his untimely death, with admiration for his character and achievements and with deepest sympathy for his youthful widow and child. His fame will be associated indissolubly with Antarctic discovery and his name will be added to the list of glorious martyrs who have sacrificed their lives for the advancement of human enlightenment."

ANTHROPOGEOGRAPHY

INTER-UNIVERSITY CONFERENCE ON "CULTURE AND ENVIRONMENT." Two important conferences have just been concluded between members of Yale University on the one hand, and Columbia University and the American Museum of Natural History on the other. It was proposed by Professor Franz Boas of the Department of Anthropology, Columbia, that a group of interested Yale men should give in New York a number of papers bearing on the general question of "Environment and Culture." A meeting of the

New York Academy of Sciences, Section of Anthropology and Psychology, was called for the afternoon and evening of January 27, and these papers were read:

Professor Keller: The Natural Sciences as the Basis of the Social Sciences.

Professor MacCurdy: Paleolithic Environment in Europe.

Professor Bishop: Race Characteristics *vs.* Natural Environment in Commercial Success.

Professor Huntington: Climatic Influences in Human Activity.

Professor Bowman: The Physical Environment of the Machiganga Indians in Peru.

Dr. Clark Wissler: Culture and Environment.

A full interchange of views followed and considerable discussion of the specific questions raised.

On February 19, a second conference on the same subject was held at a meeting of the Yale Anthropology Club, and the following papers were offered:

Professor Boas: Arctic Conditions and Arctic Culture.

Dr. Goldenweiser: Theoretic considerations concerning the relation of culture and environment.

Dr. Spinden and Dr. Lowie: The Indians of the Southwest, and The Plains Indians, in relation to their environment.

The full views of both groups of men were thus submitted to the conference and there followed an enthusiastic and prolonged discussion of great value to all the members. Interest centered around the question of the degree to which geographic conditions either originated or guided cultural development. The geographic point of view is generally misapprehended, but discussion made it quite clear that the anthropologist and the geographer are, after all, well agreed as to fundamental principles. It was the general sense of the conference that geographic factors are of vital importance in human development, less as originators of cultural elements than as guiding forces after cultural elements have been "invented." The invention itself may be purely psychologic, though even here the environment may offer stimulating conditions. The conclusion that environment is static and culture dynamic in character aroused most discussion; the idea was finally accepted that a changing environment is established in the case of human migrations over tracts of diverse climate and relief. The conference closed with an able summary by Professor Boas, in which he emphasized the fundamental importance of geographic factors in the study of many phases of human development, in spite of the large number of cultural elements whose origins are either remotely related or wholly unrelated to physical surroundings.

ISAIAH BOWMAN.

PHYSICAL GEOGRAPHY

THE LABRADOR CURRENT AND TEMPERATURES. The British Meteorological Office has recently begun the publication of a series of *Geophysical Memoirs*, four numbers of which have been issued. As the title implies, these *Memoirs* are likely to be concerned with dynamical and physical meteorology, rather than with climatology. The first of the series, however, concerns a climatological subject fully as much as it does a more strictly meteorological one. Its title is "The Effect of the Labrador Current upon the Surface Temperature of the North Atlantic, and of the latter upon the Air Temperature and Pressure over the British Isles," and the author is Commander M. W. C. Hepworth. This particular volume has peculiar interest because of the *Titanic* disaster. The fact of greatest popular interest is the definite statement that the prevalence of ice in the Atlantic Ocean is not a cause of cold weather there, but is a symptomatic effect of the cold Labrador current.

R. DEC. WARD.

FLUCTUATIONS IN THE TRADE WINDS. J. S. Dines has recently considered "Some Long-Period Fluctuations in the Trade Winds of the Atlantic" (*Quart. Journ. Roy. Met. Soc.*, Oct., 1912). The author has discussed the hourly wind observations at St. Helena from 1892 to 1910, and finds that they tend to confirm the hypothesis of a long-period oscillation. He has further discussed the data dealing with the trade winds at San Juan, Porto Rico, and finds that there is a certain similarity in the changes at the two stations, a backing of one wind

being accompanied by a veering of the other, while the St. Helena curve seems to be about one year in advance of the one at San Juan. There thus appears to be a distinct suggestion that the two variations are connected. R. DEC. WARD.

THE ORIGIN OF KAMES. Professor H. W. Ahlmann of the University of Stockholm, discussing the view that kame is a topographic rather than a genetic term, presents an analysis of his detailed studies in a small area of kames of such simplicity that he seems to have worked out their definite origin (Valle Härad, a Kame Area in Vestergötland, Sweden. *Zeitschr. für Gletscherk.*, Vol. 6, 1912, No. 3, pp. 197-211).

The area discussed, Valle Härad, is in southern Sweden, between Lakes Wener and Wetter. It forms a part of the large Fenno-Scanian terminal moraine, which marks one of the longest halts in the otherwise rapid recession of the continental glacier of the Scandinavian peninsula. The topographic map of the area, which includes only about 32 square miles, gives an impression of a chaos of hills and hollows. This, Ahlmann shows to be made up of three submarine deltas, a succession of eskers, several drumlins, and groups of knolls, ridges, and kettles due to deposition of glacial stream gravels and slumping of buried ice blocks. All of the surface formations of Valle Härad seem to have been formed either just inside or just outside the glacier margin, and the kame hills are specifically stated to be not of subglacial origin, but to be definitely related to original deposition and subsequent slumping in connection with glacio-fluvial deposition on and about masses of stagnant ice.

LAWRENCE MARTIN.

OBITUARY

JEAN DUPUIS. This explorer, well known for his work in Tonkin, died at Monaco on Nov. 28, 1912, age 84 years. In the seventies of the last century his ascent of the Red River of Tonkin proved its availability as a route to South-western China. It was due to his explorations and studies that France was incited to adopt the policy which resulted in her predominant position in the Peninsula of Indo-China. Dupuis wrote "L'Ouverture du Fleuve Rouge au Commerce et les Evénements du Tong-kin, 1872-73," which was published in Paris in 1879 (Vol. 2, "Mémoires de la Société académique Indo-Chinoise").

CAPTAIN HJALMAR JOHANSEN. This polar explorer, while insane, put an end to his life on Jan. 3 in Christiania at the age of forty-six years. He was a member of the first *Fram* expedition under Nansen, who, in March 1895, selected him as his companion on his journey over the ice towards the Pole, which led finally to the coast of Franz Josef Land, where they spent the winter, and retreating southward in the spring fortunately reached the headquarters of the Jackson-Harmsworth expedition at Cape Flora. His Government appointed him Captain in the army as a reward for his services. Later he was associated with the Prince of Monaco, Dr. Bruce and Major Isachsen in their North Atlantic and Spitzbergen explorations. He was a member of Amundsen's party in Antarctica, but did not take part in the South Pole Expedition.

GENERAL

THE XIIITH INTERNATIONAL CONGRESS OF GEOLOGY. The meetings of the Congress will begin at Toronto on Thursday Aug. 7 instead of Aug. 21 as previously arranged, and will terminate on Thursday, Aug. 14. The headquarters will be at the University of Toronto. All inquiries regarding arrangements should be addressed to the Secretary, at the Victoria Memorial Museum Ottawa, Canada.

TWO MEDALS AWARDED TO PROFESSOR DAVIS. The Elisha Kane gold medal of the Geographical Society of Philadelphia was presented to Professor W. M. Davis on Jan. 28 and the Culver Medal of the Geographic Society of Chicago on Feb. 19.

WOMEN ADMITTED TO FELLOWSHIP IN THE ROYAL GEOGRAPHICAL SOCIETY. A special meeting of the Royal Geographical Society was held on Jan. 15 to consider the admission of women on the same terms as men to the Fellowship of the

Society. In 1893 the members of the Society voted on this question and the proposal to admit women was defeated by 1,178 to 480. The sentiment of the Society has recently been tested by a much larger poll the vote being 2,189 to 678 in favor of the admission of women or a proportion of more than three to one. At the special meeting, Earl Curzon of Kedleston, President of the Society, moved "that the Society approves of the election of women as Fellows," and the voting was 130 for and 51 against it. The President declared the motion carried.

During the discussion Mr. Mitchell spoke strongly against the admission of women to Fellowship. He thought the effect of the invasion of the Society's premises by women would be that they would use the premises as a club house and wherever two or three women would gather together there would be argument. He foresaw difficulties and even scandals arising if the motion were carried. Mr. A. Holness voted for the admission of women in 1893, but said he had now grown older and wiser and his vote on this occasion would be cast against the women. He believed their presence would be a hindrance to scientific work. Captain Slack thought the ladies had better organize a geographical society of their own and Mr. Burgess believed that their admission to the Society would cause trouble. On the whole, however, the discussion was strongly in favor of admitting women to the Society.

AWARDS TO GEOGRAPHERS. Of the awards made from the Bonaparte Fund for 1912 by the Académie des Sciences of Paris, as announced in a recent number of *Nature* (No. 2255), the following pertain to geographic work: 3,000 francs each to MM. Gentil, Pallary, Pitard and Bouguil, members of the French scientific expedition to Morocco which will undertake geological, zoological, botanical and agronomical researches with a view to the future development of the country; 3,000 francs to Professors de Martonne, Brunhes and Chaix for assisting in the publication of their "Atlas Photographique des Formes du Relief Terrestre;" and 2,000 francs to Professor Gruvel of Bordeaux, Director of the Bureau of Fisheries of French West Africa, for the biological and oceanographical exploration of the Baie du Lévrier, the bay on the west coast of Africa enclosed by the prong of Cape Blanco in 21° N.

In this connection M. Gentil's recent fundamental paper on the geology of Morocco will be remembered (*Ann. de Géogr.*, Vol. 21, 1912 (March 15), pp. 130-158), and attention may be called to the late Professor Tarr's note on the Atlas Photographique des Formes de Relief Terrestre in the *Bulletin*, Vol. 44, 1912, pp. 94-97.

TRAINING COLLEGE STUDENTS IN FIELD WORK. The course in Geologic and physiographic Surveying under the auspices of the Department of Geology of Oberlin College, announced in the April 1912 number of the *Bulletin* (Vol. 44, p. 292), was given during the seven weeks, June 21-August 10 in Virginia, under the direction of Dr. George D. Hubbard, head of the department. Nine men and two women took part. Camp was established near Narrows, Va. A topographic map of the area was first prepared, then the geologic map, sections and diagrams were made. The economic resources were studied, a careful systematic collection of fossils from the entire section was made and the physiographic history of the region interpreted. Each student prepared a complete report covering all phases of the work in accordance with the plan of the geological folios of the U. S. Geological Survey.

The course is designed to train men desiring Survey positions in all field methods, and to give teachers a summer's practice in interpreting geologic, physiographic and geographical phenomena. Five members of the party were graduate students. A similar survey will be undertaken in the summer of 1913 in the same neighborhood.